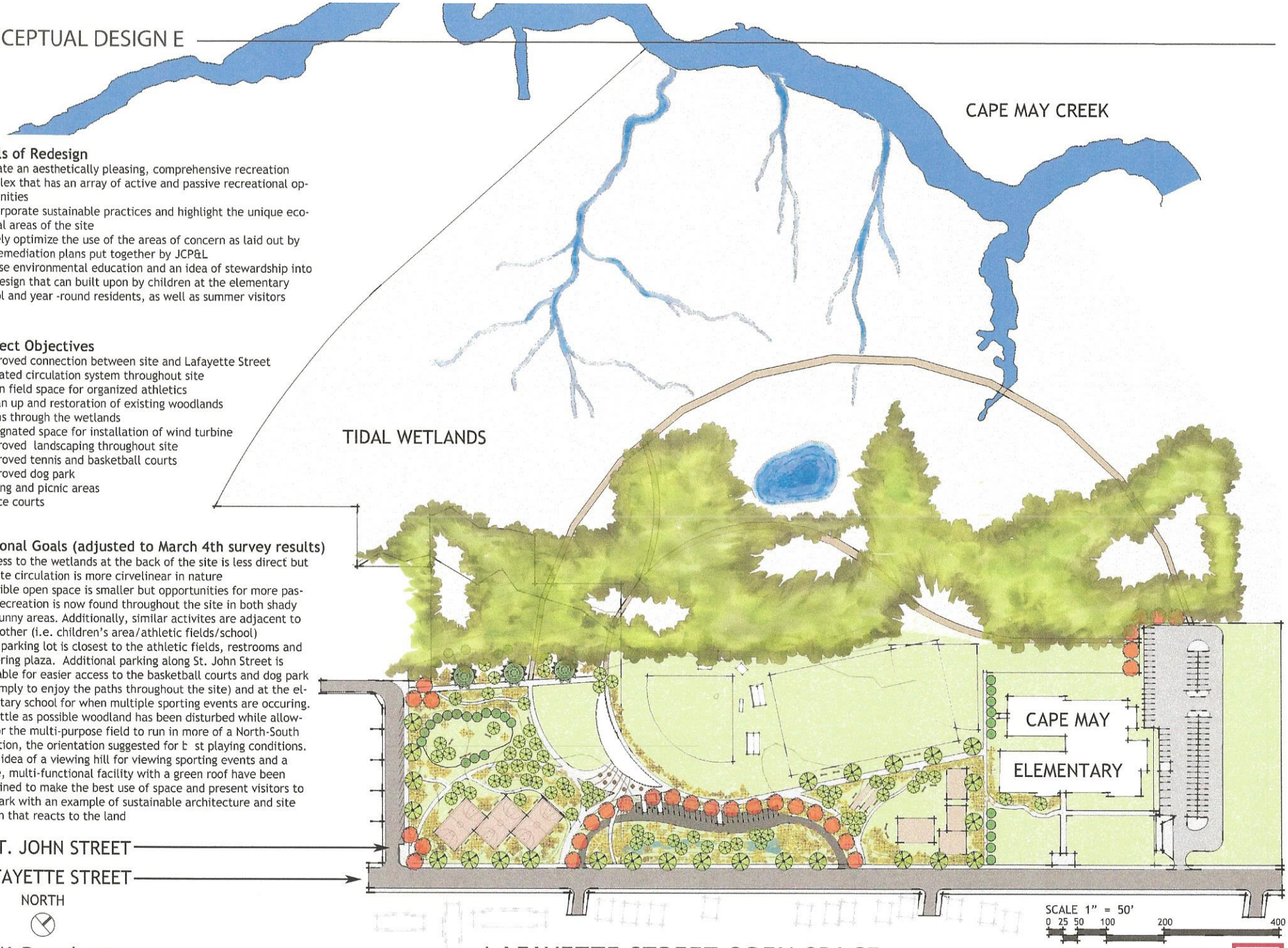
CONCEPTUAL DESIGN E



Goals of Redesign

- Create an aesthetically pleasing, comprehensive recreation complex that has an array of active and passive recreational opportunities
- Incorporate sustainable practices and highlight the unique ecological areas of the site
- Safely optimize the use of the areas of concern as laid out by the remediation plans put together by JCP&L
- Infuse environmental education and an idea of stewardship into the design that can built upon by children at the elementary school and year -round residents, as well as summer visitors

Project Objectives

- Improved connection between site and Lafayette Street
- Updated circulation system throughout site
- Open field space for organized athletics
- Clean up and restoration of existing woodlands
- Paths through the wetlands
- Designated space for installation of wind turbine
- Improved landscaping throughout site
- Improved tennis and basketball courts
- Improved dog park
- Sitting and picnic areas
- Bocce courts

Personal Goals (adjusted to March 4th survey results)

- Access to the wetlands at the back of the site is less direct but the site circulation is more cirvelinear in nature
- Flexible open space is smaller but opportunities for more passive recreation is now found throughout the site in both shady and sunny areas. Additionally, similar activites are adjacent to each other (i.e. children's area/athletic fields/school)
- The parking lot is closest to the athletic fields, restrooms and gathering plaza. Additional parking along St. John Street is available for easier access to the basketball courts and dog park (or simply to enjoy the paths throughout the site) and at the elementary school for when multiple sporting events are occuring.
- As little as possible woodland has been disturbed while allowing for the multi-purpose field to run in more of a North-South direction, the orientation suggested for b st playing conditions.
- The idea of a viewing hill for viewing sporting events and a single, multi-functional facility with a green roof have been combined to make the best use of space and present visitors to the park with an example of sustainable architecture and site design that reacts to the land

Julia K. Dougherty
Professors Stuart Appel, FASLA & Bess Yates, ASLA

LAFAYETTE STREET OPEN SPACE
Cape May, NJ

Temple University
May 5, 2010

CONCEPTUAL DESIGN E

Inspirations for the Green Roof and Artful Stormwater Management at Lafayette Street

Nanyang Technological University's School of Art campus
Singapore

It's design is not only about looks but function; the building's turfed roofscape helps lower the temperature of the roof and surrounding areas. It is accessible from steps along the roof edge. The structure at Lafayette Street would mimic these buildings, wrapping around the outside of existing Dellas Field.

Grass amphitheatre at Weeting Primary School
Norfolk, United Kingdom

This amphitheatre has no visual structural support and the seats look as if they are a natural phenomenon. As the roof of the building at Lafayette Street flattens out towards the middle, grass covered rows of seating would rise out of the sloped lawn and provide a green alternative to traditional stadium seating.

The Palais Omnisports de Paris-Bercy arena green roof
Paris, France

This arena, completed in 1984, was constructed on a brown-field site where the city wanted to renovate the area and introduce as much green space as possible. The slope provides more grass area than a flat surface would; at the Lafayette Street park, it serves as additional area for passive recreation.

Aqueducts in Temple Ambler's Sustainable Wetland Garden
Ambler, PA

This stepped aqueduct system recirculates run-off water using solar power. It provides the area with visual interest and a pleasant background sound. This idea could be adapted to the Lafayette Street arbor system, using the run-off from the plaza area by funneling it through the central beam of the arbor to a water feature that greets people walking up the path from the pedestrian entrance at Jefferson Street. A sculpture or mosaic like the one in Temple's garden could go in the feature.

Plant List

Evergreen Trees
Ilex opaca
American Holly
Juniperus virginiana
Common Juniper
Pinus rigida
Pitch Pine

Evergreen Shrubs
Ilex glabra
Inkberry Holly
Kalmia latifolia
Mountain laurel
Rhododendron maximum
Great Rhododendron/Laurel

Street Trees (deciduous)
Acer rubrum
Red Maple
Gleditsia triacanthos var. inermis
Thornless Honey Locust

Small Trees (deciduous)
Amelanchier Canadensis
Canadian serviceberry
Betula nigra
River Birch
Carpinus caroliniana
Musclewood
Cercis canadensis
Eastern Redbud
Cornus alternifolia
Pagoda Dogwood
Salix nigra
Black Willow

Deciduous Shrubs
Cephalanthus occidentalis
Buttonbush
Hamamelis virginiana
Witch hazel
Hydrangea quercifolia
Oakleaf hydrangea
Lindera benzoin
Spicebush
Photinia melanocarpa
Black Chokeberry
Rhododendron viscosum
Swamp Azalea
Syringa vulgaris
Common Lilac
Vaccinium caesariense
New Jersey blueberry
Viburnum dentatum
Arrowwood viburnum

Grasses, Sedges and Vines
Arrhenatherum elatius
Tall oatgrass
Carex bullata
Button Sedge
Carex exilis
Coastal Sedge
Dichanthelium ovale
Egg-leaf panic grass
Parthenocissus quinquefolia
Virginia Creeper
Schizachyrium scoparium
Little Bluestem
Tridens flavens
Purple top grass
Wisteria frutescens
American Wisteria

Perennials
Arethusa bulbosa
Dragon's Mouth
Asclepias lanceolata
Fewflower Milkweed
Caltha palustris
Yellopw Marsh Marigold
Geranium maculatum
Spotted Geranium
Helenium autumnale
Common Sneezeweed
Heliopsis helianthoides
Oxeye Sunflower
Monarda punctata
Spotted Beebalm
Rudbeckia fulgida
Orange Coneflower
Verbena hastata
Swamp Verbana

All plants are native to New Jersey with most being native to Cape May County; the majority of these plants offer food sources and habitat for birds and butterflies because Cape May is located along a major migration route.






Schematic Plan

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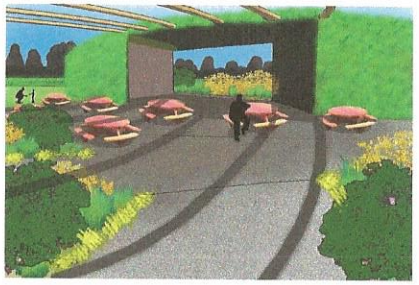
CONCEPTUAL DESIGN E

Views through the design

Site Perspectives

1. Artful Stormwater Management

Coming from the entrance at Jefferson Street and heading towards the main plaza, visitors are greeted with an artful display of stormwater management. Rain water is collected from the plaza area and recirculated: it is pumped up from a cistern below the plaza, through an aqueduct and into the feature at the front of the site (pictured is Temple Ambler's wetland garden mosaic sculpture). The aqueduct is one of six arms of an arbor that provides shade to the plaza and surrounding area.



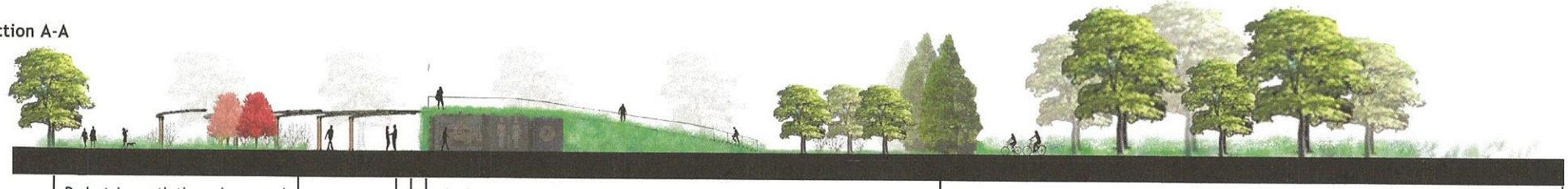
2. Plaza

When approaching the plaza from Lafayette Street, visitors can see through the void in the structure to the baseball field on the other side. Restrooms, concessions and park administration would all be accessible through the breezeway. Tables in the plaza could be used for eating or passive recreation. The near-by water feature would provide a pleasant background noise and the arbor partially shades the entire plaza area. Tables could be moved to the side of the plaza if it needed to be used for a large gathering (market, show, festival, etc).

3. Sloped Green roof with grass amphitheatre seating

The park facilities structure doubles as a "viewing hill" for baseball games with its green roof. The roof slopes down to meet the ground plane and can be accessed directly at the end of the structure in this picture, or by an accessible ramp on the opposite edge (not shown). The grass slope offers visitors an opportunity to relax in a sunny spot in the park and the amphitheatre seats at the top of the structure offer a green alternative to traditional stadium seating. A buffer consisting of meadow grasses would be planted at the edge of the baseball field to make a more distinct seperation between the field and the pedestrian path.

Section A-A



Pedestrian path through created wetlands at the front of the site

Plaza would contain moveable furniture which could be relocated to hold a larger event or town meeting; the arbor adds a lofty ceiling to the space that makes it really feel like a large outdoor room.

The longest side of the sloped green roof would have a ramp system would meet ADA specifications so it could be accessed by everyone. The sides of the green roof would be sloped so that visitors could comfortably lounge or engage in passive recreation (people watching, reading, meditating, etc) with fewer interruptions.

Park facilities (restrooms, concessions and park administration)

The trails through the ecologically rich wetlands in the N-NW part of the site would be constructed with sustainable construction techniques and materials in mind.

SCALE 1" = 25'

0 25 50 100 200 400

NORTH

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